



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

Reprint

647.8510

Job Sheet 203877



5239595

Part No: 647.8510

Job Qty: 40 pcs

Part Name: Insert



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/28/19

Job Tracking No:

Due Date: 8/13/20

Created By: Jennifer Renwick

Type: Stock

Description:

Note: DWG REV N/C IPP REV:A NEW ISSUE 16-11-09 JLM VERIFIED BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Doosan - 1	40 pcs		4/28/20	1.00	11.72	Doosan - 1	<i>JK</i>	12-11-2019
110	QC 2	40 pcs		4/28/20	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14	<i>JK</i>	12-14-2019
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		

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120 QC 8	40 pcs	4/28/20	0.00 0.00	QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	19-12-14 De
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
122 Outsource - 17 - Passivate	40 pcs	4/28/20		GRO002-VC	7 01-02-2020
123 Packaging 2-1 - Receive - B4B	40 pcs	4/28/20	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	DAS
				Packaging 2 - 3 - B4B	3701-08-2020
				Packaging 2 - 5 - B4B	9-89
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	

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				Packaging 2 - 19 - B4B		
				Packaging 2 - 20 - B4B		
				Packaging 2 - 21 - B4B		
				Packaging 2 - 22 - B4B		
				Packaging 2 - 23 - B4B		
				Packaging 2 - 24 - B4B		
				Packaging 2 - 25 - B4B		
				Packaging 2 - 26 - B4B		
				Packaging 2 - 27 - B4B		
				Packaging 2 - 28 - B4B		
				Packaging 2 - 29 - B4B		
				Packaging 2 - 30 - B4B		
				Packaging 2 - 31 - B4B		
				Packaging 2 - 32 - B4B		
				Packaging 2 - 33 - B4B		
				Packaging 2 - 34 - B4B		
				Packaging 2 - 35 - B4B		
				Packaging 2 - 36 - B4B		
124	QC 6	40 pcs	4/28/20	0.00 0.00	QC 6 - 9	DAS
					QC 6 - 68	82
					QC 6 - 61	9-89
					QC 6 - 40	
					QC 6 - 81	OCT 05 2020
					QC 6 - 81	QC 6 - 82
130	Packaging 3-1 - Stock - B4B	40 pcs	8/13/20	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	DAS
					Packaging 3 - 7 - B4B	28
					Packaging 3 - 8 - B4B	9-89
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	OCT 06 2020
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
						</

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				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140	QC 21 - SA	40 pcs	8/13/20	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70
					QC 21 - SA - 53

DAS

21

9-39

OCT 06 2020

Part Op 100 - Doosan (Doosan Lathe) 1-Turn as per Folio FB512 & Dwg 647.8500 Folio Rev: ____ Dwg Rev: ____

Descriptions: 110 - (QC2- Inspect parts off machine FAI/FAIB)

120 - (QC8- Inspect parts - second check)

122 - ISSUE PO: _____ SUPPLIER: GROUPE ALTECH -Passivate, MIL-S-5002 TYPE 6 AS PER DWG (MPP-172) - Certificate of Conformity is required

123 - (Receive & Inspect for Damage & Mat'l Certs)

124 - (QC6- All purchased or subcontracted products)

130 - (Identify as per dwg & Stock Location: _____) LOCATION: WA001

140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M303R0.625	303 Round Bar 0.625"	2 ft (.05 ea)	100-Doosan - 1	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Doosan - 1	M303R0.625	2	3	0

Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Insert	0.016Inches $\pm$ 0.005	0.021 0.011		
2	Insert	45.000Degrees $\pm$ 0.500	45.500 44.500	Angle	
3	Insert	0.020Inches $\pm$ 0.010	0.030 0.010	Radius	
4	Insert	0.210Inches + 0.005 - 0.001	0.215 0.209	Diameter	
5	Insert	0.300Inches $\pm$ 0.010	0.310 0.290	Diameter	
6	Insert	0.350Inches $\pm$ 0.010	0.360 0.340	Diameter	DAS 82 9-89
7	Insert	0.060Inches $\pm$ 0.005	0.065 0.055		
8	Insert	0.283Inches $\pm$ 0.005	0.288 0.278		DA 8 9-8
9	Insert	0.560Inches + 0.000 - 0.010	0.560 0.550		
10	Insert	0.367Inches $\pm$ 0.005	0.372 0.362		
11	Insert	0.097Inches $\pm$ 0.005	0.102 0.092	Diameter	
12	Insert	0.075Inches $\pm$ 0.005	0.080 0.070	Depth	

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Dart Aerospace Ltd.
1270 Aberdeen St
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K6A 1K7
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Tel (613) 632-5200

PURCHASE ORDER

POHB045480



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045480

PO Date: 12/31/19

Due Date: 1/10/20

**Purchase Order
Revision:**

Revision Date:

Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	203877	647.8510	647.8500 Rev NC	Insert ISSUE PO: SUPPLIER: GROUPE ALTECH -Passivate, MIL-S-5002 TYPE 6 AS PER DWG (MPP-172) - Certificate of Conformity is required	Received	-	1/10/20	40 pcs	40 pcs	0 pcs	\$3.125/pcs	\$0.00
Grand Total:												\$0.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

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Hawkesbury, ON
K8A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

Container History for S239595

Change Date	By	Job	Part	Rev	Operation	Material	Chg	Serial No/Batch	Gross	Tare	Net	Len	Qty	Location	Status	Accounting Job	Defect	Type	Last Action	From	Shelf Date	Loaded	Active
12/11/19 1:13 PM	Bodzy-Dero, Justin	203877	647.8510		Doosan - 1			S239595	0	0	0	0	0	Doosan - 1	WIP				Created at Control Panel			No	Yes
12/11/19 1:14 PM	Bodzy-Dero, Justin	203877	647.8510		Doosan - 1			S239595	0	0	0	0	40	Doosan - 1	WIP				Production Recorded at Control Panel			No	Yes
12/11/19 1:14 PM	Bodzy-Dero, Justin	203877	647.8510		Doosan - 1			S239595	0	0	0	0	40	Doosan - 1	Allocated				Production Update	S239588	12/11/19	No	Yes
12/11/19 1:14 PM	Bodzy-Dero, Justin	203877	647.8510		Doosan - 1			S239595	0	0	0	0	40	Doosan - 1	Allocated				Production Update	S239594	12/11/19	No	Yes
12/14/19 4:53 PM	Bodzy-Dero, Justin	203877	647.8510		Doosan - 1			S239595	0	0	0	0	40	QC 2 - 65	Allocated				Loaded to Workcenter	S239594	12/11/19	Yes	Yes
12/14/19 4:54 PM	Bodzy-Dero, Justin	203877	647.8510		QC 2			S239595	0	0	0	0	40	QC 2 - 65	Allocated				Record Operation	S239594	12/11/19	No	Yes
12/14/19 4:54 PM	Bodzy-Dero, Justin	203877	647.8510		QC 2			S239595	0	0	0	0	40	QC 2 - 65	Allocated				Production Recorded at Control Panel	S239594	12/11/19	No	Yes
12/14/19 4:54 PM	Bodzy-Dero, Justin	203877	647.8510		QC 2			S239595	0	0	0	0	40	QC 2 - 65	WIP				Container Full	S239594	12/11/19	No	Yes
12/14/19 4:54 PM	Auclair, Guillaume	203877	647.8510		QC 2			S239595	0	0	0	0	40	QC 8 - 8	WIP				Loaded to Workcenter	S239594	12/11/19	Yes	Yes
12/14/19 4:54 PM	Auclair, Guillaume	203877	647.8510		QC 8			S239595	0	0	0	0	40	QC 8 - 8	WIP				Record Operation	S239594	12/11/19	No	Yes
12/14/19 4:54 PM	Auclair, Guillaume	203877	647.8510		QC 8			S239595	0	0	0	0	40	QC 8 - 8	WIP				Production Recorded at Control Panel	S239594	12/11/19	No	Yes
12/14/19 4:54 PM	Auclair, Guillaume	203877	647.8510		QC 8			S239595	0	0	0	0	40	QC 8 - 8	WIP				Container Full	S239594	12/11/19	No	Yes
1/2/20 9:01 AM	Guerin, Kimberley	203877	647.8510		QC 8			S239595	0	0	0	0	40	GRO002-VC	WIP				Sent to Subcontract - 1818	S239594	12/11/19	No	Yes
1/8/20 4:23 PM	Paul, Derick	203877	647.8510		Outsource - 17 - Passivate			S239595	0	0	0	0	40	Packaging 2 - 13 - B4B	WIP				Received from Subcontract - bin-for-bin	S239594	12/11/19	No	Yes
1/8/20 4:23 PM	Paul, Derick	203877	647.8510		Outsource - 17 - Passivate			S239595	0	0	0	0	40	Packaging 2 - 13 - B4B	WIP				Loaded to Workcenter	S239594	12/11/19	Yes	Yes
1/8/20 4:24 PM	Paul, Derick	203877	647.8510		Packaging 2-1 - Receive - B4B			S239595	0	0	0	0	40	Packaging 2 - 13 - B4B	WIP				Record Operation	S239594	12/11/19	No	Yes
1/8/20 4:24 PM	Paul, Derick	203877	647.8510		Packaging 2-1 - Receive - B4B			S239595	0	0	0	0	40	Packaging 2 - 13 - B4B	WIP				Production Recorded at Control Panel	S239594	12/11/19	No	Yes
1/8/20 4:24 PM	Paul, Derick	203877	647.8510		Packaging 2-1 - Receive - B4B			S239595	0	0	0	0	40	Packaging 2 - 13 - B4B	WIP				Container Full	S239594	12/11/19	No	Yes
1/20/20 11:09 AM	Chuprun, John	203877	647.8510		Packaging 2-1 - Receive - B4B			S239595	0	0	0	0	40	QC 6 - 68	WIP				Loaded to Workcenter	S239594	12/11/19	Yes	Yes
1/20/20 11:09 AM	Chuprun, John	203877	647.8510		QC 6			S239595	0	0	0	0	40	QC 6 - 68	WIP				Record Operation	S239594	12/11/19	No	Yes
1/20/20 11:09 AM	Chuprun, John	203877	647.8510		QC 6			S239595	0	0	0	0	40	QC 6 - 68	WIP				Production Recorded at Control Panel	S239594	12/11/19	No	Yes
1/20/20 11:09 AM	Chuprun, John	203877	647.8510		QC 6			S239595	0	0	0	0	40	QC 6 - 68	WIP				Container Full	S239594	12/11/19	No	Yes

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Certificat de Conformité / Certificate of Compliance

(025200-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.grouppaltech.com

Bon de Livraison / Packing Slip

025200 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax: .

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
06-Jan-2020		Jigar Patel		POHB045480				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back-Order
1	647.8510 Rev.	647.8500 PASSIVATION NITRIC #1/ DICHROMATE [PASSIVATION NITRIC #1/ DICHROMATE] AS PER MPP-172, SECTION 6.0 THAT IS IAW QQ-P-35C TYPE - 2 TRY 1 PART FIRST	PASSIVATION CH	40	40	0	0	0

DAS
82
9-89

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.



2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

FACTURE / INVOICE**025200-1**

Int. Ref. INV 0025847

Facturer à / Bill to

DART AEROSPACE LTD

1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Livré à / Shipped to:

DART AEROSPACE LTD

1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA

Acheteur / Buyer:

Date de Facture Invoice Date		Facturé Par Invoice Generated By		Transport / No de Comptes Courier / Acc. No.		Termes Terms		Bon Commande Client Customer Purchase Order No.	
06-Jan-2020						NET30		POHB045480	
#Ligne Line #	Quantité Quantity	No de Pièce/ Part Number	Description Pièce / Part description	Traitement Surface treatment		U/M	Prix / Price Unitaire Total		
1	40	647.8510 <i>PkSép # 025200-1</i> <i>Job#:</i>	647.8500	PASSIVATION NITRIC #1/ DICHROMATE [PASSIVATION NITRIC #1/ DICHROMATE] AS PER MPP-172, SECTION 6.0 THAT IS IAW QQ-P-35C TYPE - 2 TRY 1 PART FIRST		CH	\$0.90 \$36.00		
MIN-CHARGE DAS 82 9-89 RECEIVED									

La responsabilité de NOTRE COMPAGNIE se limite à la valeur de notre procédé effectué sur vos pièces. Toute réclamation doit être faite dans les 10 jours suivant la réception de vos pièces.

The liability of OUR COMPANY is limited to the value of the process performed on your parts. All claims must be made within 10 days after receiving your parts.

SOUS-TOTAL / SOUS-TOTAL	\$125.00
Coûts Add / Add. Costs	\$0.00
Frais de transport / Freight	\$0.00
HST	\$6.25
	\$0.00

TPS/GST # 144821816 RT0001
 TVQ/QST # 1202696615 TQ0001

TOTAL (CAD) \$131.25